

Ecotour of the Trans-Canada Highway Ottawa-North Bay

About this map

"Ecotour" was devised by the Canadian Forestry Service to help you, as a traveller, understand the forces that have shaped the landscape you see — forces ranging from earthquakes to earthworms, from west winds to white pines.

Your journey along the Trans Canada Highway is identified by code numbers on your map; their significance is explained at the left. Estimate distances between them from mileages shown on the map; you will be able to see most Ecotops without stopping. A few "Ecotops" are described where you can refresh yourself and interpret your surroundings. You will also be passing through different types of landscape; these can be interpreted from the descriptions of "Ecozones".

Some interesting places on other roads are also mentioned should you wish to get off the beaten track. Between these various features younger travellers might try their hand at "Ecogames".

Credit

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Ecological interpretative map
Ottawa-North Bay

Our forest environment and the Canadian Forestry Service

The volume and multiplicity of forest products has earned Canada a place of prominence among the forest nations of the world. But now, with a dawning comprehension of its role in the great ecological complex, Canadians begin to perceive the forest's broader value as a stabilizer of desired natural patterns and as a retreat for the relaxation and well-being of people living in crowded cities.

The Canadian Forestry Service of the Department of the Environment is intimately concerned with the forest environment and the forest industries. Its objective is to promote the most efficient management and use of Canada's forest resources compatible with environmental concerns by:

- conducting research and development in the forest management and forest products fields,
- disseminating information and providing technical services to provincial governments, forest industries, and other agencies,
- preparing and distributing information to the general public,
- providing grants to universities to encourage development of centres of research excellence in forestry.

Description of "Ecotops".
The numbers correspond with those on the map along Highway 17

1 Features of ecological interest for the visitor in the capital include the National Museum of Natural Sciences at Melville and McLeod Streets and the Central Experimental Farm with its Horticultural Gardens and Arboretum, adjoining the Rideau Canal Driveway.

2 Travelling along the Ottawa River Parkway you may see Gatineau Hills across the river and huge rafts of pulpwood logs en route from northern forests to local mills. Remnants of log cribs in the water hint of river drives of a century ago when rafts of squared pine timber moved down to Quebec and on to the world's markets.

3 South of the intersection of Highways 17 and 44 is a good example of abandoned farm reverting naturally to brush. Among the willow and alder brush, the seedlings of elm, ash, aspen and soft maple which will develop into the typical lowland hardwood forest visible beyond.

4 To the north is a recently cutover woodlot. The dense undergrowth, mainly soft maple and aspen sprouts, soon heals the scars of logging on this rich, moist site.

5 The Arnprior area was and still is a focal point of the great pine lumbering industry that developed the Ottawa Valley. Early timbermen spoke of limitless tracts of white and red pine up the Madawaska and other tributaries. They were wrong, for practically no "virgin" timber remains, but there are extensive second growth stands in some areas.

Magnificent trees can still be seen in "The Grove" at Arnprior. "The Grove" is a private estate of David A. Gilles whose family is closely linked with the region's lumbering industry; "The Grove" will be open to the public for a trial period.

6 Here is a "climax" forest of mature sugar maple, beech and hemlock, species which can reproduce abundantly in shade. Logging, fires or hurricanes may remove these climax species and encourage establishment of such light-loving trees as white birch and aspen poplar. Being short-lived, these species are followed by white pine, ash and other intermediate species. These, in turn, are succeeded by the climax species — the process of forest succession.

7 Boy scouts planted these red pines in 1931 on an area of coarse, eroded soil. Red pine is the major reforestation species in Southern Ontario, rehabilitating large tracts of poor, sandy and gravelly land which had been mistakenly cleared, overworked and abandoned.

8 At Renfrew you cross the Opeongo Road started by the government in 1853 to induce settlement of the vast Canadian interior. You might visit the stone McDougall Mill Museum which stands solidly alongside the historic Second Chute of the Bonnechère River. Look also for the Swinging Bridge and the wooden penslocks of the lower hydro plant; also look downstream to the 200 foot deep valley cut by the river through clay and gravel.

9 Settlers of the valley made their homes and other buildings from squared logs of local pine; the Rosebank Church, built by Methodists in 1846, is a fine example. The surrounding grove of red and white pines typifies the forest that once prevailed on coarser soils of the region. Look eastward for a good view of Bonnechère Valley.

10 Just north of Haley Station a magnesium-rich limestone called dolomite is mined. Magnesium metal is refined here and magnesium products are manufactured locally. Dolomite is also prepared for agricultural and building uses. Look for specimens of the white crystalline rock along the highway and the road to the mine.

11 A historic plaque commemorates the nearby discovery of Champlain's astrolabe. In 1613, the navigation instrument was lost along the overland route of ponds and lakes by which the famous explorer bypassed a series of rapids on the Ottawa River. Near Muskrat Lake he encountered a settlement of Algonquin Indians who "till the ground and reap corn" — the first hint of agriculture in the region.

12 If you have time, stop beside a marsh near Cobden at the intersection of the Beachburg Road. For an intimate view make your way through the sedges to a low, dry ridge which encircles the centre of the marsh — a habitat of muskrat, teal, yellowthroat and other secretive creatures.

13 Muskrat Lake has been famous since Indian days for smelt and pike fishing and is a rest stop for Canada geese and ducks in migration. Note granite face across the lake; highway side is limestone. The rich clay loam plain along the lake is good mixed farming resulting from beaver or man's activities can drastically alter this pattern.

14 Here the ravages of Dutch Elm Disease are all too evident in dead and dying trees. Accidentally imported from Europe, this fungal disease has been spread by elm bark beetles. Elm is a valuable timber species and the disease has disrupted the local economy in some areas.

15 The Chemplain Trail Museum, its pioneer buildings and equipment, fires or hurricanes may remove these climax species and encourage establishment of such light-loving trees as white birch and aspen poplar. Being short-lived, these species are followed by white pine, ash and other intermediate species. These, in turn, are succeeded by the climax species — the process of forest succession.

16 West of Pembroke the highway climbs a hill, an ancient raised shoreline marking the western edge of the Champlain Sea. About 11,000 years ago toward the end of glaciation, the weight of ice depressed the land allowing the Atlantic to invade. When the climate warmed and the ice front receded, an enlarged Lake Huron (covering what is now Lake Huron and Lake Nipissing basins with an outlet to the Ottawa Valley) drained this way, forming a great delta of sand and yellow birch, balsam and ash to the Old Mattawa Road.

17 Stop at this roadside picnic area for a draught of crystal clear, cold spring water gushing from a small pipe. The trees above are red pines.

18 Just east of Grant Creek the highway bisects a pond which is fringed with alder, laurel and other bog shrubs; sedges and cattails claim the shallows; water lilies take over at depths of 2 to 4 feet and pond weeds predominate beyond. Small islands of semi-floating peat gradually develop a "floating bog". But changes in water levels resulting from beaver or man's activities can drastically alter this pattern.

19 Recent rock cuts demonstrate the monumental upheavals of the earth's crust that occurred in the dim dawn of Precambrian time. The island is spectacular in spring.

20 Suburbs in the backwoods — Deep River townsite demonstrates how a community can fit into the natural landscape rather than completely destroy it. Avenues and blocks of native trees help retain the forest setting.

21 Watch for dead foliage on roadside trees, mainly the result of road salt dispersed by traffic. White pine is most susceptible, white spruce least. Roadside trees can also be damaged or killed by exposure, ditching and flooding.

22 Pause for a while at Melville Bay roadside park and enjoy the breeze freshened by millions of air-conditioners — the trees themselves. Here is a meandering trout stream, its silty banks lined with a rich vegetation of ferns and shrubs, a favourite haunt of many songbirds. A half-mile hike upstream along a rough secluded trail takes you past little waterfalls and pools, through rich woods of silver maple, yellow birch, balsam and ash to the Old Mattawa Road.

23 At Rolphion the Des Joachims Dam powers the largest hydroelectric generating station on the Ottawa. Newly-formed Holden Lake flooded a considerable low-lying area upstream. The lake demonstrates aquatic plant development. The low, damp shore is fringed with alder, laurel and other bog shrubs; sedges and cattails claim the shallows; water lilies take over at depths of 2 to 4 feet and pond weeds predominate beyond. Small islands of semi-floating peat gradually develop a "floating bog". But changes in water levels resulting from beaver or man's activities can drastically alter this pattern.

24 Jack pines in this area were heavily infested for several years by budworm which defoliated and killed many trees. Aerial spraying finally controlled the insects and severely damaged trees were salvaged by logging. Fire, insect epidemics and logging have continually changed the face of the forest through history.

25 Potato farms have developed on these sandy fields; potato and rye crops are grown in alternate years, the rye helping as a soil conditioner. Other farms in the area have reverted to brush and will eventually be forested again.

26 Samuel de Champlain Provincial Park is an excellent place to learn the romantic history and ecology of the region. You can almost hear the singing of the voyageurs as you look upon a replica of the historic McConnell Island, where a Hudson Bay Company trading post stood in the 1700's, you may see timber cutting down the channel below the dam. The control dam at the west end of the island is spectacular in spring.

27 Recent rock cuts demonstrate the monumental upheavals of the earth's crust that occurred in the dim dawn of Precambrian time. The island is spectacular in spring.

28 This small rock basin lake is typical of many in the region with steep, wooded shoreline, rocky promontory, swampy bay, water lilies and beaver lodge. A double beaver dam at the western outlet maintains the water level. Loons, grebes and ducks frequent this secluded lake.

29 Gibson Lake provides an interesting roadside picnic area. At the lake's eastern outlet, conveniently located by the highway ditch, is a well-constructed beaver dam. Moose can sometimes be seen feeding on water plants in the shallows. Listen for the haunting call of the loon and the silvery song of the thrush. Note here a good example of how nature reclaims an abandoned stretch of highway through plant colonization.

30 At Deux-Rivières many islands were formed as the water rose behind Des Joachims Dam. Roots of an inundated forest are evident at low water. Waterfowl are frequently seen here and there is good pike and pickerel fishing.

31 Here is a "boulder pavement", a terrace of boulders and gravel laid down by glacial rivers. Evidence of a severe fire can be seen in charred pine snags. At first an open blueberry plain, the land is being invaded by scrubby aspen, birch and red maple sprouts.

32 Stop at this roadside picnic area for a draught of crystal clear, cold spring water gushing from a small pipe. The trees above are red pines.

33 Just east of Grant Creek the highway bisects a pond which is fringed with alder, laurel and other bog shrubs; sedges and cattails claim the shallows; water lilies take over at depths of 2 to 4 feet and pond weeds predominate beyond. Small islands of semi-floating peat gradually develop a "floating bog". But changes in water levels resulting from beaver or man's activities can drastically alter this pattern.

34 Maitawa, "the town in the pines", is an Indian word for meeting of waters. Here the westward voyageurs left the Ottawa and followed the Mattawa River toward Lake Nipissing, the upper Great Lakes and the northwest. The town has been a trading post since 1784 for fur trader, logger and now tourist. For years it has been a sawmill centre; forest resources are Maitawa's staple commodity.

35 Along the Highway, young stands of aspen have developed from root suckering after forest fire. When an aspen stem is cut or scorched the undamaged roots often produce abundant sprouts which grow vigorously in open conditions. This aggressive pioneer species has, therefore, become predominant over vast forest lands which were formerly covered by pine, spruce or other species.

36 Jack pines in this area were heavily infested for several years by budworm which defoliated and killed many trees. Aerial spraying finally controlled the insects and severely damaged trees were salvaged by logging. Fire, insect epidemics and logging have continually changed the face of the forest through history.

37 You are passing a black spruce-tamarack bog in a basin where peat has accumulated from centuries of rotting sedges and sphagnum mosses. A thick alder cover usually follows if a swamp forest such as this is logged.

38 Just west of Rutherford a sloping causeway provides a good view of a beaver marsh. The lodge, made of mud and sticks, is visible to the north. Though they have been trapped for fur over three centuries, beavers are still very common here. Beavers are very effective in changing the landscape, transforming many low-lying timbered areas into ponds and marshes.

39 Boating and canoeing enthusiasts can turn at Rutherford and proceed to Blanchard's Landing and venture into Mattawa Wild River Park, a section of the historic canoe route.

40 In the south ditch of the road, at the North Bay municipal boundary sign, beavers have demonstrated their engineering ability — and the highway traffic be damned!

41 This is the site of the La Vase Portage connecting the Ottawa-Mattawa route with Lake Nipissing; from there voyageurs made their way via the French River to the upper Great Lakes and westward. Unknown Indians, Etienne Brûlé (1610), Champlain (1613), Father Jean de Brébeuf (1626), Alexander Henry (1764), Alexander Mackenzie — many courageous men sweated their way over these "Mud" portages outward and homeward bound.

ECOTOPES

Identitree

First person to identify tree (use tree silhouettes at left) scores:
1 point: white birch, white pine.
2 points: red oak, sugar maple, red elm, yellow birch, beech, tamarack, eastern white cedar, jack pine, eastern white pine, balsam fir, black spruce.

Wildlife watch

Score your observations as follows:
1 point: chipmunk, groundhog, squirrel.
2 points: beaver, muskrat, porcupine, rabbit, skunk.
3 points: aspens, elm, tamarack, cedar, red pine, jack pine.
4 points: maples, yellow birch, balsam fir, spruces.
5 points: deer, fox, racoon.
6 points: bear, moose, wolf.
Half marks for dead animals.

Great Lakes - St. Lawrence Forest Region and its trees:

Environment Canada

Forestry Service

Environnement Canada

Service des Forêts

Canadian Forestry Service

